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09/942,828	08/29/2001	Toshihiro Tsukada	P5976a	1001
20178 7590 04/09/2008 EPSON RESEARCH AND DEVELOPMENT INC INTELLECTUAL PROPERTY DEPT 2580 ORCHARD PARKWAY, SUITE 225 SAN JOSE, CA 95131				
EXAMINER				
QIN, YIXING				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/942,828

**Applicant(s)**

TSUKADA, TOSHIHIRO

**Examiner**

Yixing Qin

**Art Unit**

2625

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-15, 17-19 and 21-52 is/are pending in the application.
- 4a) Of the above claim(s) 5-15 and 22-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 17-19 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 10/24/07.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notices of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

In response to applicant's amendment received 8/28/07 and the election from 1/29/08, all requested changes have been entered.

### ***Election/Restrictions***

Applicant's election without traverse of claims 1-3, 17-19, and 21 in the reply filed on 1/29/08 is acknowledged.

### ***Response to Arguments***

This action is in response to the claims from 8/28/07 and the election from 1/29/08. Claims 1-3, 17-19, and 21 are being addressed. Again, from the previous rejection, the Office's stance is that of the Indei reference discloses a printer and a print control device in Fig. 2, item 5. One can see the various modifications and modules of the device in the other figures. However, the applicant's invention essentially is a re-arrangement of the various modules. Compare, for example, Fig. 1 of the applicant's drawings with Figs. 3 and 8 (the print control device and the backup device for the print control device) of Indei. Both essentially disclose the same part (e.g. cpu, memory and backup memory, communications devices). Thus, the various modules are present, except Indei arranges them in one particular manner, while the applicant arranges them in another. Since Indei has decided to divide up the print server into the printer control device 5a and the printer 5b and also has a backup device, it would have been obvious

to divide them up other ways, or even combine them into one machine. Thus, the fact that the interface device is external to a printer would be considered an obvious variation.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claims 1-3, 17-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Indei (U.S. Patent No. 5,131,077) and in view of the applicant's admitted prior art in the background of the specification.

Regarding claims 1, 17, Indei discloses "a rewritable, nonvolatile, primary data memory unit for storing protected data including setting data and history data;" (Fig. 1 a file holding section (item 32). Column 3, lines 41-43 disclose that this file holding section 32 corresponds to a RAM or a magnetic disk. The RAM or magnetic disk can be nonvolatile. )

Although Indei describes data that can be received as billing data, user profile data, confidential data (column 3 , lines 27-30), it does not disclose specifically printer settings or historical data.

The applicant's disclosure of the prior art in the background of the specification (henceforth referred to as simply "background") in page 1, lines 15-21, discloses "EEPROM," and storing "printer setting," and historical data."

a receiver for receiving command data from a host device through said external interface device; ( Fig. 1 a file r/w control section (item 31). One can see from the arrows that it can send and receive information from a host. Fig. 1 is an embodiment of Inde's backup control device for a printer (column 3, lines 27-37). The interface device is the backup system, and one can see from Figs. 1, 6 or 8 that it interfaces with a network (i.e. can interface to hosts) and a printer.)

a printing unit for printing print document data based on said command data received by the receiver; (column 2, lines 57-59, that "[d]ata prepared [is transferred] to the print server 5, where it is printed out as a hard copy." Fig. 2 shows the print server include a printer. The applicant's background discloses in page 1, line 26 various command data that could be sent to the printer. )

a data update unit for updating selected protected data; (column 3, lines 55-61, a file renewing and forming section (Fig. 1, item 34). Lines 59-61, especially, disclose that the "...most recently updated important data is stored in the file holding section 34.")

and a data protection unit for making a back-up, nonvolatile, copy of protected data updated by said data update unit, said data protection unit including a backup unit for copying the protected data content of said primary data memory unit to a rewritable, nonvolatile reserve data memory unit disposed in said external interface device. (In the third embodiment of Indei's invention, one would understand that a floppy disk is used when one is storing data into a floppy disk drive (Fig. 8, item 56). Column 6, lines 34-36 discloses that the data is backed up. Although the above limitations mentions items from the first embodiment in Fig. 1, one can clearly see the third embodiment also has file renewing and holding sections.

One can see from Fig. 8 that the floppy disk drive is part of the backup system nonvolatile reserve data memory unit would be the floppy disk that is used to store the data in. When the floppy is in the drive, it would be disposed in the backup system. Also, as mentioned above, it would be obvious to one of ordinary skill in the art to have used other storage devices.)

Both the Indei and the prior art in the applicant's background relate to the backing up of protected or important data. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to store information such as "printer setting" and "historical data" as mentioned in the background of the applicant's specification in a backup unit such as a floppy disk or a file server in Indei's invention. The motivation for doing so would be to backup different types of data deemed necessary by particular users.

The limitations of claim 17 are steps corresponding to the 2<sup>nd</sup> through 5<sup>th</sup> limitations of claim 1. Please refer to claim 1 for these rejections. Please note that the Indei reference discloses three different embodiments in which data is backed up into a file server, web server, and a floppy disk and one skilled in the art would have understood that other known backup storage devices could be used.

Also, for the claims mentioning the use of a program to perform some steps, one skilled in the art would have known that Indei's invention could be created in either hardware (i.e. circuits/gates) or software (i.e. using hardware description language)

Regarding claim 2, 18 Indei discloses in Fig. 8 (item 51) a R/W control section for writing to the floppy disk drive. Column 6, lines 25-30 discloses that the backing up of the data to the floppy disk is triggered by a "...predetermined instant in time..." Indei also discloses that the backup would, for instance, be activated once a day (column 3, lines 50-53). One would understand the need the to update the backup storage with the most current settings at the time in which the settings in the primary storage changes so that the most recent backup can be used if a restore function is needed to be performed.

The newly amendment claim calls for that copying of the data is fully under control of the printing apparatus. As mentioned above in column 6, lines 25-30, a timing signal can cause the a backup operation to occur. This would basically equate to an automatic backup process, which would read upon the newly amended claims.

Regarding claim 3, 19 Indei discloses in Fig. 8 (item 51) and column 6, lines 37-43 that a R/W control section acts as data restore unit since it controls the writing of the between the floppy disk and the file holding section.

Indei discloses in column 6, lines 50-55 that data can be quickly restored from the backup when it has been erased. The erasure of the data in the primary memory could trigger a restore.

Column 6, lines 11-12 discloses a time setting section 57, which acts as an event controller for detecting the occurrence of said data-backup triggering event, which is a "predetermined instant in time" as mentioned in the rejection to claim 2 above.

Indei discloses in column 6, lines 50-55 that data can be easily restored to the primary memory if it has been erased. Although not explicitly stated by Indei, one would have understood that the "data-restore triggering event" could include a user inputting a request for file restore. The controller for this would be the file read and write control section (i.e. column 6, lines 37-43).

Regarding claim 21, although neither Indei nor the applicant's background mentions the use of the above storage mediums, the examiner takes Official Notice that storage mediums such as CDs, floppies, hard disks, etc. are old and well known formats for storing programs and data. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use one of the above storage mediums.

The motivation for using such mediums is that the data stored is non-volatile and can be portable when using CDs or floppies.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YQ

/Mark K Zimmerman/  
Supervisory Patent Examiner, Art Unit 2628